

AMENDMENTS TO THE CLAIMS:

Claims 1-11. (Cancelled)

12. (Currently Amended) An arrangement for the detection of fluorescent light comprising:

at least one imaging microscope unit for determining and selecting measurement locations for an analysis of molecular interaction in at least two dimensions;
a device unit for analyzing the molecular interactions in small volumes;
a shared control unit for operating the imaging microscope unit and the at least one device unit; and
a computer for graphically depicting results from analyzing the molecular interactions in small volumes.

wherein the at least one device unit provides data and analysis based on a correlation with the image of the imaging microscope unit

wherein the ~~computer performs an~~ analysis of molecular interactions is carried out by fluorescence correlation spectroscopy (FCS), and the imaging microscope unit ~~for imaging~~ is based on the principle of laser scanning microscopy.

13. (Cancelled)

14. (Cancelled)

15. (Previously Presented) The arrangement according to claim 12, further comprises a movable specimen table and/or vertical adjustment of the objective for the selection of the specimen location for FCS measurement.

16. (Previously Presented) The arrangement according to claim 12, further comprises at least one scanner for the selection of the specimen location.

17. (Previously Presented) The arrangement for detecting the light coming from an illuminated specimen according to claim 12, wherein the at least one imaging microscope unit is a laser scanning microscope (LSM) and an arrangement which is coupled into the illumination beam path of the LSM between the scanner of the LSM and the specimen for excitation and detection by FCS via a shared evaluation unit.

18. (Previously Presented) The arrangement for detecting the light coming from an illuminated specimen according to claim 12, wherein the at least one imaging microscope unit is a laser scanning microscope (LSM) and additional detectors are arranged following the scanner of the LSM in the detection direction for detecting FCS signals.

19. (Withdrawn) A method for detecting the light coming from an illuminated specimen, comprising the steps of:

scanning the specimen by focusing illumination light from point to point at least in two dimensions;

detecting light coming from the specimen via at a detector; and

carrying out Fluorescence Correlation Spectroscopy (FCS) evaluation during the scanning process and/or after the scanning process for at least one specimen point; and

storing and allocating the value detected during scanning and the at least one value detected in the FCS evaluation.

20. (Cancelled)

21. (Withdrawn) The method according to claim 19, wherein the preceding method steps are carried out for a plurality of specimen points which are preselected automatically and/or manually.

22. (Withdrawn) The method according to claim 19, further comprising the step of providing shared graphic depictions of the values determined during scanning and during the FCS evaluation.

23. (Withdrawn) The method according to claim 19, further comprising the step of initiating an FCS measurement when the scanner is stopped during the scanner process.